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EXAMINER

BLAN, NICOLE R

ART UNIT	PAPER NUMBER
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1792

NOTIFICATION DATE	DELIVERY MODE
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02/01/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/583,638	Applicant(s) EIERMANN ET AL.	
	Examiner NICOLE BLAN	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-30 and 32-42 is/are rejected.
- 7) ☒ Claim(s) 31 and claims 38-41 when they depend from claim 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>06202006, 10082008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 23 and 32 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 23 states that the film bag is formed *preferably* of plastic or metal, and as discussed in the detailed rejection below, *preferably* is not positively recited; therefore, it carries no patentable weight. Claim 32 states that operation of a pump and the valves is controlled by of the *preferably* electronic program control, and as discussed in the detailed rejection below, *preferably* is not positively recited; therefore, it carries no patentable weight.
2. Claims 33 and 34 are objected to because of the following informalities: In line 2 of both claims 33 and 34, "a washing container" should read "the washing container". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 26 recites the limitation "the shut-off valve" in line 2 and "the waste water pipe" in line 4. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 28 recites the limitation "the second rinsing water pipe" and "the third rinsing water pipe" in line 2. There is insufficient antecedent basis for this limitation in the claim.

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6. Claim 29 recites the limitation "the spray arms" and "the filter bag" in line 3.

There is insufficient antecedent basis for this limitation in the claim.

7. Claim 31 recites the limitation "the shut-off valve" in line 3. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 32 recites the limitation "the lye pump" in lines 1-2, "the circulating pump" in line 2, "the actuation" in line 2, "the shut-off valves" in line 2, and "the preferable electronic program controller" in line 3. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 35 recites the limitation "the first rinsing water pipe" in line 3. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 36 recites the limitation "the flexible film bag" in line 1 and "the rinsing water pipes" in line 2. There is insufficient antecedent basis for this limitation in the claim.

11. Regarding claim 36, the phrase "for example or e.g." renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

12. Claim 42 recites the limitation "the circulating pump" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claim 42 is rejected under 35 U.S.C. 102(b) as being anticipated by Centis (U.S. Patent 5,617,885, hereinafter ‘885).

Claim 42: ‘885 teaches a method for operating a dishwasher [abstract] comprising a storage reservoir for storing rinsing water [(11), Fig. 1; col. 2, lines 1-19] and at the end of a washing process the rinsing water is introduced into the storage reservoir before a following rinsing process [col. 2, lines 55-67], the rinse water is then fed back into a the rinsing process from the reservoir [col. 3, lines 2-9] and the storage reservoir is filled with filtered water from the circulating pump [(15), Fig. 1; col. 1, line 64; col. 2, lines 10-19] because water flows through a filter [(5), Fig. 1] into the sump [(4), Fig. 1] and then is fed into the reservoir [(11), Fig. 1] via the circulating pump [(15), Fig. 1].

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. Claims 22-25, 27, 28, 32, 33, 35 and (38-40)/(22-25, 27, 28, 32, 33, 35) are rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter ‘885) in view of Tabasso (EP 0546348, hereinafter EP ‘348).

Claim 22: ‘885 teaches a dishwasher [abstract] that carries out a washing program from a washing process using rinsing water [col. 1, lines 5-9; col. 2, lines 40-47], comprising a program controller [col. 2, lines 28-29 and 51-54], a washing container [(1), Fig. 1; col. 1, lines 60-62], a system for circulating the rinsing water [(3, 4, 14, 11, 13), Fig. 1; col. 1, line 60 – col. 2, line 19], and a storage reservoir [(11), Fig. 1; col. 2, line 4]. ‘885 does not teach that the storage reservoir is embodied as a film bag. However, EP ‘348 teaches a similar dishwasher for recovering, storing, and returning rinse water for further use during various phases of a washing process by using a flexible bag as a storage reservoir because using bag-like reservoirs takes up minimum space [Figs. 1 and 2; abstract; col. 1, line 47-55; col. 2, lines 29-39; col. 3, lines 28-31]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the flexible bag reservoir taught by EP ‘348 as the reservoir of ‘885 with a reasonable expectation of success because EP ‘348 teaches that it is known to use a flexible bag for

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recovering, storing, and returning rinse water for further use during various phases of a washing process because they take up minimum space within the dishwasher.

Regarding the recitation “for rinsing water for storage and re-use at a later time of at least a part of the rinsing water present in the dishwasher” and “can be matched in size to the volume of the liquid”, this recitation is a statement of intended use which does not patentably distinguish over ‘885 since ‘885 meets all the structural elements of the claim(s) and is capable of storing rinsing water for re-use at a later time and matching the bag in size to the volume of the liquid if so desired. See MPEP 2114.

Claim 23: ‘885 and EP ‘348 teach the limitations of claim 22 above. With respect to the recitation “preferably of plastic or metal,” it is not positively recited; therefore, it carries no patentable weight. Thus, EP ‘348s teaching of a flexible bag meets the claimed limitation.

Claim 24: ‘885 and EP ‘348 teach the limitations of claim 22 above. EP ‘348 teaches that the flexible bag can hold varying amounts of water such that the bag can hold the largest volume of liquid likely or planned to be filled in [col. 2, lines 52-55]. Without evidence of unexpected results, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the appropriate volume of the bag based on the volume of rinsing liquid likely or planned to be contained into the bag, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

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With respect to the recitation "preferably two sets of rinsing water," it is not positively recited; therefore, it carries no patentable weight. Thus, the claimed limitation is met.

Claim 25: '885 and EP '348 teach the limitations of claim 22 above. '885 also teaches a lye pump for pumping away the rinsing water from the dishwasher [(15), Fig. 1], a circulating pump [(3), Fig. 1] for acting on the spray arms [(2), Fig. 2]. Modified '885 also teaches the bag can be filled with rinse water via a first rinsing water pipe [(14), Fig. 1] from the lye pump [col. 1, line 60 - col. 2, line 19].

Claim 27: '885 and EP '348 teach the limitations of claim 25 above. '885 also teaches the rinse water is passed from the reservoir via a third rinsing pipe [(12), Fig. 1] for reintroducing the rinse water into the dishwasher [col. 2, lines 10-19].

With respect to the recitation "preferably leads from the film bag into a pump sump in the lower area of the washing container," it is not positively recited; therefore, it carries no patentable weight. Thus, the claimed limitation is met.

Claim 28: '885 and EP '348 teach the limitations of claim 25 above. '885 also teaches that a third rinsing pipe is closed by a shut-off valve [col. 2, lines 18-19].

Claim 32: '885 and EP '348 teach the limitations of claim 22 above. '885 also teaches that the program control unit controls the pumps as well as the shut-off valve [col. 2, lines 28-29 and 35-39].

With respect to the recitation "preferably electronic control program," it is not positively recited; therefore, it carries no patentable weight. Thus, the claimed limitation is met.

Claim 33: '885 and EP '348 teach the limitations of claim 22 above. '885 teaches that the reservoir [(11), Fig. 1] is arranged between an outer wall of the dishwasher [see dashed line in Fig. 1] and a side wall of the washing container [(1), Fig. 1].

Claim 35: '885 and EP '348 teach the limitations of claim 22 above. '885 also teaches that the reservoir has at least one opening [where the conduit (14) enters at the top of reservoir (11) in Fig. 1].

With respect to the recitation "preferably opens into the first rinsing water pipe," it is not positively recited; therefore, it carries no patentable weight. Thus, the claimed limitation is met.

Claim 38: '885 and EP '348 teach the limitations of claim 22-25, 27, 28, 32, 33 and 35 above. As discussed in claim 22 above, the reservoir of '885 has been replaced with a flexible bag reservoir taught by EP '348. Modified '885 teaches a method for operating a dishwasher [abstract] comprising a flexible bag reservoir for storing rinsing water [(11), Fig. 1; col. 2, lines 1-19] that has been removed from a rinsing water circuit [col. 2, lines 1-19] and at the end of a washing process the rinsing water is introduced into the flexible bag reservoir before a following rinsing process [col. 2, lines 55-67], the

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rinse water is then fed back into a the rinsing process from the reservoir [col. 3, lines 2-9].

EP '348 teaches that the flexible bag can hold varying amounts of water such that the bag can hold the largest volume of liquid likely or planned to be filled in [col. 2, lines 52-55]. Without evidence of unexpected results, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the appropriate volume of the bag based on the volume of rinsing liquid likely or planned to be contained into the bag, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Claim 39: '885 and EP '348 teach the limitations of claim 38 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above. '885 also teaches that the particular program from which the wash liquid can be removed is a rinsing phase [col. 2, lines 40-45] and the washing liquid reintroduced to the cycle from the reservoir can be used in a subsequent pre-wash process [col. 3, lines 3-6]. Refer to claim 38 for the particular path through which the washing liquid flows into the reservoir and back into the washing container.

Claim 40: '885 and EP '348 teach the limitations of claim 38 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above. '885 also teaches that the rinsing water is fed back into the water cycle at the beginning of the next cycle and that the operation can

occur during at least one rinsing phase which indicates that when it occurs in a second rinse step, this would read on an "intermediate rinse" step [col. 2, lines 40-45].

18. Claims 26 and (38-40)/26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Tabasso (EP 0546348, hereinafter EP '348), and further in view of Perry's Chemical Engineering Handbook.

Claim 26: '885 and EP '348 teach the limitations of claim 25 above. '885 also teaches that a single pump may be used along with flow diverter means [reads on "water deflector valve"] to deliver water to the reservoir via the first rinse water pipe [(14), Fig. 1] or to a drain [reads on "waste water pipe"; see "the arrow" in Figure 1, that is the drain] [see col. 3, lines 29-32], and the conduit (6) in Figure 1 reads on "a second rinsing water pipe". '885 does not teach a shut-off valve from the lye pump to the reservoir. However, it is notoriously well known to an ordinary artisan in the filed of process control engineering to use valves after pumps in order to prevent cavitation in the pump by running the pump dry from liquid as taught by Perry's and that shut-off valves are just one of the options available for valve selection [pages 8-71 through 8-78]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a valve after the pump of modified '885 with a reasonable expectation of success because Perry's teaches it is well known to use shut-off valves to prevent cavitation in pumps.

With respect to the recitation “preferably closed by means of a shut-off valve,” it is not positively recited; therefore, it carries no patentable weight. Thus, the claimed limitation is met.

Regarding the recitation “water deflector valve is provided which either *opens* the first rinsing water pipe when the shut-off valve from the lye pump to the film bag is *opened or* a second rinsing water pipe from the lye pump to the waste water pipe”, this recitation is a statement of intended use which does not patentably distinguish over ‘885 since ‘885 meets all the structural elements of the claim(s) and is capable of either *opening* the first rinsing water pipe when the shut-off valve from the lye pump to the film bag is *opened or* to a second rinsing water pipe from the lye pump to the waste water pipe if so desired. See MPEP 2114.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (emphasis in original)

Claim 38 is rejected over ‘885, EP ‘348 and Perry’s as applied to claim 26 above, and for the reasons applied to claim 38 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 39 is rejected over '885, EP '348 and Perry's as applied to claim 38 above, and for the reasons applied to claim 39 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 40 is rejected over '885, EP '348 and Perry's as applied to claim 38 above, and for the reasons applied to claim 40 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

19. Claims 29 and (38-40)/29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Tabasso (EP 0546348, hereinafter EP '348), and further in view of Arreghini et al. (U.S. Patent 5,606,878, hereinafter '878).

Claim 29: '885 and EP '348 teach the limitations of claim 22 above. '885 also teaches a lye pump for pumping away the rinsing water from the dishwasher [(15), Fig. 1], a circulating pump [(3), Fig. 1] for acting on the spray arms [(2), Fig. 2] [col. 1, lines 62-64; col. 2, lines 1-19] and that the reservoir can be filled with rinse water via a first rinsing water pipe [(14), Fig. 1] [col. 1, line 60 - col. 2, line 19]. '885 teaches filtering the water in a sump that feeds to both the reservoir and the circulating pump [Fig. 1; col. 1, lines 62-64], but it does not teach that the storage reservoir can be filled with filtered rinse water from the circulating pump. However, '878 illustrates that it is known to utilize a circulating pump for both a recycle stream as well as for supply into a storage reservoir [(4 – pump), (2 - reservoir), and (15 - recycle stream), Fig. 5; col. 2, lines 36-44; col. 6, lines 17-29]. It is prudent to look at '878 since it is in the same field of endeavor

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as '885 that being the storage of rinsing water for reuse in a later cycle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the circulating pump of '885 in the manner disclosed by '878 with a reasonable expectation of success because '878 teaches filling a reservoir with water from the circulating pump. Thus, modified '885 would teach that the water enters the sump and is filtered and is then supplied to the reservoir from the circulation pump.

Claim 38 is rejected over '885, EP '348 and '878 as applied to claim 29 above, and for the reasons applied to claim 38 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 39 is rejected over '885, EP '348 and '878 as applied to claim 38 above, and for the reasons applied to claim 39 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 40 is rejected over '885, EP '348 and '878 as applied to claim 38 above, and for the reasons applied to claim 39 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

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20. Claims 30 and (38-40)/30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Tabasso (EP 0546348, hereinafter EP '348) in view of Arreghini et al. (U.S. Patent 5,606,878, hereinafter '878) in view of Perry's Chemical Engineering Handbook, and further in view of Thies (U.S. Patent 6,432,216, hereinafter '216).

Claim 30: '885, EP '348 and '878 teach the limitations of claim 29 above. '885, EP '348 and '878 do not teach a shut-off valve on the first rinsing pipe. However, it is notoriously well known to an ordinary artisan in the field of process control engineering to use valves after pumps in order to prevent cavitation in the pump by running the pump dry from liquid as taught by Perry's and that shut-off valves are just one of the options available for valve selection [pages 8-71 through 8-78]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a valve after the pump of modified '885 with a reasonable expectation of success because Perry's teaches it is well known to use shut-off valves to prevent cavitation in pumps.

'885, EP '348, '878 and Perry do not teach a water deflector valve for releasing one, both or none of the spray arms. However, '216 teaches it is known to have a dishwasher with multiple spray arms and to use a deflector valve to divert the liquid between spray arms for cleaning at different portions in the container [col. 2, lines 45-51; col. 4, lines 56-58; col. 5, lines 9-20]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a deflector valve as taught by '216 in modified '885 because '216 teaches it is known to have a dishwasher

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with multiple spray arms and to use a deflector valve to divert the liquid between spray arms for cleaning at different portions in the container.

Regarding the recitation “water deflector valve for releasing one, both or none of the spray arms for acting upon with water”, this recitation is a statement of intended use which does not patentably distinguish over modified ‘885 since ‘885 meets all the structural elements of the claim(s) and is capable of releasing one, both or none of the spray arms for acting upon with water if so desired. See MPEP 2114.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (emphasis in original)

Claim 38 is rejected over ‘885, EP ‘348, ‘878, Perry’s and ‘216 as applied to claim 30 above, and for the reasons applied to claim 38 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 39 is rejected over ‘885, EP ‘348, ‘878, Perry’s and ‘216 as applied to claim 38 above, and for the reasons applied to claim 39 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 40 is rejected over ‘885, EP ‘348, ‘878, Perry’s and ‘216 as applied to claim 38 above, and for the reasons applied to claim 40 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

21. Claims 34 and (38-40)/34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Tabasso (EP 0546348, hereinafter EP '348), and further in view of Fumagalli (EP 0607628, hereinafter EP '628).

Claim 34: '885 and EP '348 teach the limitations of claim 22 above, but they do not teach that the reservoir is located between a top wall of the dishwasher and a top wall of the washing container. However, EP '348 illustrates that it was known to arrange a storage reservoir for the recovery, storage and reuse of washing water for use in a dishwasher between a top wall of the dishwasher and a top wall of the washing container [abstract; Fig. 1]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the arrangement taught by EP '628 in place of the arrangement taught by modified '885 because EP '628 teaches it is a known arrangement for the recovery, storage and reuse of washing water for use in a dishwasher.

Claim 38 is rejected over '885, EP '348 and EP '628 as applied to claim 34 above, and for the reasons applied to claim 38 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 39 is rejected over '885, EP '348 and EP '628 as applied to claim 38 above, and for the reasons applied to claim 39 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 40 is rejected over '885, EP '348 and EP '628 as applied to claim 38 above, and for the reasons applied to claim 40 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

22. Claims 36 and (38-40)/36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Tabasso (EP 0546348, hereinafter EP '348), in view of Johnston (U.S. Patent 4,518,599, hereinafter '599), and further in view of Nishino et al. (U.S. Patent 3,872,013, hereinafter '013).

Claim 36: '885 and EP '348 do not teach that the film bag is coated on the water-guiding side at least in part with an anti-bacterial agent. However, '599 teaches that antibacterial compounds are useful for controlling harmful effects of microorganisms in water especially in systems which utilize circulating water because the recirculated water can become contaminated [col. 2, lines 36-44], but it does not teach filtering in the reservoir. However, '013 illustrates a filter coating in part a reservoir to inhibit the propagation of bacteria [(24), Fig. 1; col. 1, lines 6-7; col. 2, lines 5-45]. Therefore, it would have been obvious to an ordinary artisan to coat the reservoir with a filter to inhibit the propagation of bacteria [reads on "anti-bacterial agent"] of modified '885 because '599 discloses that microorganisms can contaminate water in systems that use recirculating lines and '013 teaches placing a filter to inhibit the propagation of bacteria within a reservoir.

In light of the rejection under 35 U.S.C. 112, second paragraph, the claim limitation is met.

Claim 38 is rejected over '885, EP '348, '599 and '013 as applied to claim 36 above, and for the reasons applied to claim 38 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 39 is rejected over '885, EP '348, '599 and '013 as applied to claim 38 above, and for the reasons applied to claim 39 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 40 is rejected over '885, EP '348, '599 and '013 as applied to claim 38 above, and for the reasons applied to claim 40 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

23. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Arreghini et al. (U.S. Patent 5,606,878, hereinafter '878).

Claim 37: '885 teaches a dishwasher [abstract] that carries out a washing program from a washing process using rinsing water [col. 1, lines 5-9; col. 2, lines 40-47], comprising a program controller [col. 2, lines 28-29 and 51-54], a washing container [(1), Fig. 1; col. 1, lines 60-62], a system for circulating the rinsing water [(3, 4, 14, 11, 13), Fig. 1; col. 1, line 60 – col. 2, line 19], a storage reservoir [(11), Fig. 1; col. 2, line 4], a lye pump [(7), Fig. 1], and a circulating pump that acts on the arms [(3), Fig. 1; col. 1, lines 62-64]. '885 teaches filtering the water in a sump that feeds to both the reservoir and the circulating pump [Fig. 1; col. 1, lines 62-64], but it does not teach that the storage

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reservoir can be filled with filtered rinse water from the circulating pump. However, '878 illustrates that it is known to utilize a circulating pump for both a recycle stream as well as for supply into a storage reservoir [(4 – pump), (2 - reservoir), and (15 - recycle stream), Fig. 5; col. 2, lines 36-44; col. 6, lines 17-29]. It is prudent to look at '878 since it is in the same field of endeavor as '885 that being the storage of rinsing water for reuse in a later cycle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the circulating pump of '885 in the manner disclosed by '878 with a reasonable expectation of success because '878 teaches filling a reservoir with water from the circulating pump. Thus, modified '885 would teach that the water enters the sump and is filtered and is then supplied to the reservoir from the circulation pump.

Regarding the recitation “for rinsing water for storage and re-use at a later time of at least a part of the rinsing water present in the dishwasher”, this recitation is a statement of intended use which does not patentably distinguish over '885 since '885 meets all the structural elements of the claim(s) and is capable of storing rinsing water for re-use at a later time if so desired. See MPEP 2114.

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24. Claims (38-40)/37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Arreghini et al. (U.S. Patent 5,606,878, hereinafter '878) as applied to claim 37 above, and further in view of Tabasso (EP 0546348, hereinafter EP '348).

Claim 38: '885 and '878 teach the limitations of claim 37 above. '885 and '878 do not teach that the storage reservoir is embodied as a film bag. However, EP '348 teaches a similar dishwasher for recovering, storing, and returning rinse water for further use during various phases of a washing process by using a flexible bag as a storage reservoir [Figs. 1 and 2; abstract; col. 2, lines 29-39; col. 3, lines 28-31]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the flexible bag reservoir taught by EP '348 as the reservoir of '885 with a reasonable expectation of success because EP '348 teaches that it is known to use a flexible bag for recovering, storing, and returning rinse water for further use during various phases of a washing process.

Regarding the teaching of the method steps of claim 38, refer to the reasons applied to claim 38 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 39 is rejected over '885, '878 and EP '348 as applied to claim 38 above, and for the reasons applied to claim 39 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Claim 40 is rejected over '885, '878 and EP '348 as applied to claim 38 above, and for the reasons applied to claim 40 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

25. Claim 41/38/(22-25, 27-29, 32-33, and 35-37) is rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Tabasso (EP 0546348, hereinafter EP '348) as applied to claim 38 above (which depends from claims 22-25, 27, 28, 32, 33 and 35), in view of Arreghini et al. (U.S. Patent 5,606,878, hereinafter '878), in view of Johnston (U.S. Patent 4,518,599, hereinafter '599), and further in view of Nishino et al. (U.S. Patent 3,872,013, hereinafter '013).

Claim 41: '885 and EP '348 teach the limitations of claim 38 (as it depends from claims 22-25, 27-29, 32, 33 and 35) above. '885 teaches filtering the water in a sump that feeds to both the reservoir and the circulating pump [Fig. 1; col. 1, lines 62-64], but it does not teach that the storage reservoir can be filled with filtered rinse water from the circulating pump. However, '878 illustrates that it is known to utilize a circulating pump for both a recycle stream as well as for supply into a storage reservoir [(4 – pump), (2 – reservoir), and (15 – recycle stream), Fig. 5; col. 2, lines 36-44; col. 6, lines 17-29]. It is prudent to look at '878 since it is in the same field of endeavor as '885 that being the storage of rinsing water for reuse in a later cycle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the circulating pump of '885 in the manner disclosed by '878 with a reasonable expectation of success because '878 teaches filling a reservoir with water from the circulating pump. Thus,

modified '885 would teach that the water enters the sump and is filtered and is then supplied to the reservoir from the circulation pump.

'885, EP '348 and '878 do not teach that rinse water is filtered in the film bag. However, '599 teaches that antibacterial compounds are useful for controlling harmful effects of microorganisms in water especially in systems which utilize circulating water because the recirculated water can become contaminated [col. 2, lines 36-44], but it does not teach filtering in the reservoir. However, '013 illustrates a filter present within a reservoir to inhibit the propagation of bacteria [Fig. 1; col. 1, lines 6-7; col. 2, lines 5-45]. Therefore, it would have been obvious to an ordinary artisan to filter the water within the reservoir of modified '885 because '599 discloses that microorganisms can contaminate water in systems that use recirculating lines and '013 teaches placing a filter to inhibit the propagation of bacteria within a reservoir.

26. Claim 41/38/26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Tabasso (EP 0546348, hereinafter EP '348) in view of Perry's Chemical Engineering Handbook as applied to claim 38 (which depends from claim 26) above, in view of Arreghini et al. (U.S. Patent 5,606,878, hereinafter '878), in view of Johnston (U.S. Patent 4,518,599, hereinafter '599), and further in view of Nishino et al. (U.S. Patent 3,872,013, hereinafter '013).

Claim 41 is rejected over '885, EP '348 and Perry's as applied to claim 38 (which depends on claim 26) above, and for the reasons applied to claim 41 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

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27. Claim 41/38/30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Tabasso (EP 0546348, hereinafter EP '348) in view of Arreghini et al. (U.S. Patent 5,606,878, hereinafter '878) in view of Perry's Chemical Engineering Handbook, in view of Thies (U.S. Patent 6,432,216, hereinafter '216) as applied to claim 38 (which depends from claim 30) above, in view of Johnston (U.S. Patent 4,518,599, hereinafter '599), and further in view of Nishino et al. (U.S. Patent 3,872,013, hereinafter '013).

Claim 41 is rejected over '885, EP '348, '878, Perry's and '216 as applied to claim 38 above (which depends from claim 30) above, and for the reasons applied to claim 41 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

28. Claim 41/38/34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Tabasso (EP 0546348, hereinafter EP '348) in view of Fumagalli (EP 0607628, hereinafter EP '628) as applied to claim 38 (which depends from claim 34) above, in view of Arreghini et al. (U.S. Patent 5,606,878, hereinafter '878), in view of Johnston (U.S. Patent 4,518,599, hereinafter '599), and further in view of Nishino et al. (U.S. Patent 3,872,013, hereinafter '013).

Claim 41 is rejected over '885, EP '348 and EP '628 as applied to claim 38 above (which depends from claim 34), and for the reasons applied to claim 41 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

29. Claim 41/38/36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Tabasso (EP 0546348, hereinafter EP '348) in view of Johnston (U.S. Patent 4,518,599, hereinafter '599) in view of Nishino et al. (U.S. Patent 3,872,013, hereinafter '013) as applied to claim 38 above (which depends from claim 36) above, and further in view of Arreghini et al. (U.S. Patent 5,606,878, hereinafter '878).

Claim 41: '885, EP '348, '599 and '013 teach the limitations of claim 38 above. As discussed above, the combination of '599 and '013 with modified '885 teach filtering the rinse water within the reservoir.

'885, EP '348, '599 and '013 do not teach that the storage reservoir can be filled with filtered rinse water from the circulating pump. However, '878 illustrates that it is known to utilize a circulating pump for both a recycle stream as well as for supply into a storage reservoir [(4 – pump), (2 - reservoir), and (15 - recycle stream), Fig. 5; col. 2, lines 36-44; col. 6, lines 17-29]. It is prudent to look at '878 since it is in the same field of endeavor as '885 that being the storage of rinsing water for reuse in a later cycle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the circulating pump of '885 in the manner disclosed by '878 with a reasonable expectation of success because '878 teaches filling a reservoir with water from the circulating pump. Thus, modified '885 would teach that the water enters the sump and is filtered and is then supplied to the reservoir from the circulation pump.

30. Claim 41/38/37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Centis (U.S. Patent 5,617,885, hereinafter '885) in view of Arreghini et al. (U.S.

Patent 5,606,878, hereinafter '878) in view of Tabasso (EP 0546348, hereinafter EP '348) as applied to claim 38 (which depends from claim 37 above), in view of Johnston (U.S. Patent 4,518,599, hereinafter '599), and further in view of Nishino et al. (U.S. Patent 3,872,013, hereinafter '013).

Claim 41 is rejected over '885, '878 and EP '348 as applied to claim 38 above (which depends from claim 37), and for the reasons applied to claim 41 (as it depends from claims 22-25, 27, 28, 32, 33 and 35) above.

Allowable Subject Matter

31. Claims 31 and claims (38-41)/31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as well making sure all antecedent basis issues are resolved.

The following is a statement of reasons for the indication of allowable subject matter: '885 teaches a dishwasher [abstract] that carries out a washing program from a washing process using rinsing water, comprising a program controller, a washing container, a system for circulating the rinsing water, and a storage reservoir. '885 also teaches a lye pump for pumping away the rinsing water from the dishwasher, a circulating pump for acting on the spray arms and that the reservoir can be filled with rinse water via a first rinsing water pipe. '885 teaches filtering the water in a sump that feeds to both the reservoir and the circulating pump, but it does not teach that the storage reservoir can be filled with filtered rinse water from the circulating pump. However, '878 illustrates that it is known to utilize a circulating pump for both a recycle stream as

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well as for supply into a storage reservoir. It is prudent to look at '878 since it is in the same field of endeavor as '885 that being the storage of rinsing water for reuse in a later cycle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the circulating pump of '885 in the manner disclosed by '878 with a reasonable expectation of success because '878 teaches filling a reservoir with water from the circulating pump. Thus, modified '885 would teach that the water enters the sump and is filtered and is then supplied to the reservoir from the circulation pump.

'885 and '878 fail to teach that rinse water that is fed into the reservoir via the recirculation pump is also reintroduced into the washing process by shutting off the recirculating pump so that the rinse liquid can flow from the reservoir into the recirculation pump and then into a pump sump. The search conducted by the examiner has not indicated more relevant documents. Thus, the art of record does not fairly teach or suggest that rinse water that is fed into the reservoir via the recirculation pump is also reintroduced into the washing process by shutting off the recirculating pump so that the rinse liquid can flow from the reservoir into the recirculation pump and then into a pump sump.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE BLAN whose telephone number is (571)270-1838. The examiner can normally be reached on Monday - Thursday 8-5 and alternating Fridays 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicole Blan/
Examiner, Art Unit 1792

/Michael Cleveland/
Supervisory Patent Examiner, Art Unit 1792